**Contributors**

Tony Cavanagh is a librarian at Deakin University, Geelong. He is a keen gardener of Australian plants in his garden at Ocean Grove (opened regularly through Australia’s Open Garden Scheme).

Michael Bogle is the curator of Rouse Hill House, Windsor for the Historic Homes Trust of New South Wales. Michael was previously the curator of Vaucluse House where he was involved in the conservation of the Wentworth Mausoleum.

Colleen Morris originally trained as a pharmacist before completing a masters degree in heritage conservation at the University of Sydney. Colleen is currently researching early gardeners and garden styles in Australia.

Cover: Dryandra pteridifolia from Curtis’ Botanical Magazine, 1837 (no.3560), see article on page 3
**AUSTRALIAN PLANTS IN ENGLAND**

Their cultivation in the early nineteenth century

On 13 December 1791 the Colonial Chaplain, the Reverend Richard Johnson, wrote to his friend Jonathon Storard in England:

I have taken the liberty of sending you a small box of the seeds of this country, which I beg your and my Uncle Gill's acceptance of between you. Have heard that seeds are much sought after in England...I have but little time or taste for Botany otherwise here in great variety to feast the eyes and amuse the curious.

Have sent you also two or three specimens of plants.

New South Wales by this time was in dire straights with food shortages and overcrowding yet Richard Johnson, by his own admission ignorant of botany and with no inclination towards it, took the trouble to collect seeds and plant specimens from both Port Jackson and Norfolk Island to send as a gift to friends in England.

I have taken the liberty of sending you a small box of the seeds of this country...in great variety to feast the eyes and amuse the curious.

We may ask what was the attraction of New Holland plants? The English garden historian William Stearn has pointed out that the cultivation of Australian plants in England and Western Europe came towards the end of five earlier periods or waves of introduction of exotic plants. Under the benevolent reign of King George III interest in natural history reached a peak among the nobility and gentry. While it was admittedly fashionable to own a large collection of exotics and competition was often fierce among growers to own or flower first some particularly rare or unusual species, these same growers employed highly skilled staff to manage their collections, staff who developed great expertise in the cultivation requirements and management of Australian and South African species. Many of these gardeners wrote books and a book on the cultivation of *Proteaceae* which was published in 1809 contains cultivation advice which is still relevant today. We can also learn much from the flood of information published in the numerous horticultural periodicals of the early nineteenth century which featured full colored plates of flowering specimens of foreign plants in cultivation in England and were intended to enable growers to become 'scientifically acquainted' with the plants they were cultivating.

There were perhaps two other major factors which contributed to the spread and popularity of Australian plants. The first was the development of glasshouses with larger areas of glass and more efficient heating using first dry flue heating with stoves and later, steam heating. Few Australian plants could flourish out of doors in England without this protection. Secondly, there was a thriving and expanding nursery trade and commercial nurserymen propagated and cultivated Australian plants to meet the demand. By far the best known were Lee and Kennedy of Hammersmith but Lodgiges of Hackney, Knight of Chelsea and Mackay of Clapton introduced Australian plants to cultivation and even exported plants to the continent. Finally, the prominent position of the Royal Gardens at Kew with Sir Joseph Banks as their director must never be forgotten. Plants and seed were almost invariably introduced to Kew first and after they had flowered, seeds and cuttings were 'liberally distributed' to other nurseries and growers.

We currently have very little knowledge of the full range of Australian plants cultivated in England and Europe last century and one of the purposes of this paper is to lift the veil a little and talk about the plants introduced into England between 1801 and 1825. When I tell you that there were over 500 species that we know of (and probably many more unrecorded), you can perhaps appreciate just how important New Holland plants were in the English garden scene at this time.

The story of the cultivation of Australian plants in England and Europe is a very large one and I can only deal with a few aspects of it but I would briefly like to mention the collectors who put up with enormous hardships often for very little reward, and to tell you of the cultivation techniques adopted once plants were raised. The full list of plants that I have so far discovered is given in Cavanagh (1993) but how well were they grown? I have some very interesting information on this aspect and will conclude with a few comments on what lessons the work of these early English propagators might have for us.

The collectors

The five main people who probably supplied most of the seeds and plants introduced during the years 1801-1825 were George Caley, Peter Good, Charles Fraser, Allan Cunningham and William Baxter. Such were the rigours of their life as collectors that all died relatively young, often from diseases developed or arising from their work - Caley at 55 from disease contracted in the West Indies after a period superintending the Botanic Gardens at St Vincent.

it is difficult for us to appreciate just how hard it was for collectors to prepare and maintain their collections of pressed plants, seeds and living plants in pots

Good was only 25 when he succumbed to dysentery contracted in Timor in 1803; Cunningham died of tuberculosis in 1839 at the age of 48. Even though frequently sea sick, he nevertheless made four circumnavigations of Australia with Philip Parker-King, even defying Joseph Banks's request that he do more inland exploration because he realised that the voyages with King were his only opportunity to collect in northern Australia. On a more sombre note, his brother Richard was speared by natives in 1835 at
Dryandra ternifolia from Curtis’ Botanical Magazine, 1836

Stenocarpus sinuatus (Firewheel Tree) from Curtis’ Botanical Magazine, 1846

Crinum asiaticum from Curtis’ Botanical Magazine, 1822

Dryandra nervosa from Sweet’s Flora Australasica, 1826
the age of 42 while on Mitchell's expedition to the Darling River. We know almost nothing of William Baxter but he died around 1836, just a few years after his last major collections in Western Australia. Charles Fraser was also only 45 when he died suddenly in Sydney.

Return voyages to England took from 5 to 10 months so that seeds often lost their germinative power or were eaten by rats and cockroaches, while salt spray and lack of fresh water frequently killed the pot plants. Sometimes as few as 1% of pot plants reached England alive while major collections were also lost in shipwrecks - many of Robert Brown's best specimens were destroyed when the Porpoise foundered on Wreck Reef in 1803 although boxes of seeds were saved. A substantial collection from Governor Macquarie for several members of European Royal Families was destroyed when the Lady Castlereagh was wrecked off Madras in 1818. Yet material got there in vast quantities - more than 1,300 collections of material were attributed to Peter Good and 116 Australian species are documented as having been introduced by him. Baxter, Fraser and Cunningham in particular also succeeded in getting plants and seed to England, Cunningham largely because of the care he took in packing his material. He maintained a greenhouse at his home at Parramatta and spent many weeks after he returned from expeditions organising his collections and potting up and growing on his living specimens. He had a particular fascination with bulbs and orchids and introduced over 40 species of orchids to Kew most of which flowered. He is also recorded as collecting bulbs of Crinum angustifolium from the north west coast of Australia in 130°F heat; cultivated in a stove house in England, these flowered to perfection in less than a year. It was only when Nathaniel Ward introduced the closely glazed case...
that bears his name (they were really the forerunners of the terrarium) that transportation became more successful. It is perhaps fitting that it was another Cunningham, Alan's brother Richard, who sent the first consignments of plants from the Sydney Botanic Gardens in February 1834.

One can only admire the dedication of these collectors who frequently existed on a meagre salary from Banks and with little support from the Government. Cunningham frequently had to beg to have a horse and cart made available for him to bring back his collections.

**Propagation and cultivation**

Whenever possible, plants were raised from seed. Some species flowered and subsequently set fertile seed while others steadfastly refused to do so. The many botanical magazines of the period with their full page illustrations of flowering 'exotic' (foreign) specimens bear ample proof that many species were able to be flowered in the confines of a glass house. The gardeners were often highly skilled as they had practiced on the Cape Heaths and Proteaceae and were familiar with their need for a well drained situation and a dry atmosphere. Because seed was often not available, they learned to propagate from cuttings and by grafting. William McNab, first as gardener at Kew and later superintendent of the Edinburgh Botanic Gardens, was adept at striking banksia cuttings - who could claim that ability today? We also know of a 20 foot high plant of Banksia solandri with a 10ft spread which was 29 years old in the late 1850s and had been grafted onto B. integrifolia. Once again, given our limited knowledge of grafting of banksias, this is quite a feat.

They were also ready to experiment or make use of unconventional propagation techniques. Thus in the discussion in Curtis' Botanical Magazine in which the first waratah to flower in England was illustrated (1807), the propagation advice given was 'propagate by layers (layering) and imported seed'. Similarly, a note added to the list of large shrubs and trees grown at Kew states 'with the exception of Grevillea robusta, Stenocarpus cunninghamii (now sinuatus) and Lonatella ilicifolia, the whole of the proteaceae recorded in the list were raised from seed'. I assume that these three were grown from cuttings or perhaps by layering.

John Smith, Superintendent of the Kew Botanic Gardens from 1822 to 1864 has left us with a fascinating account of the collections at Kew. This included over 1,000 Australian species in several glasshouses, which together with others in the Palm House, the orchid collections and the Arboretum, indicate that between 1,100 and 1,200 Australian plant species were grown at Kew. Smith wrote:

**TABLE TWO**

<table>
<thead>
<tr>
<th>Species</th>
<th>Year of Introduction</th>
<th>Age (Years)</th>
<th>Height</th>
<th>Girth</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Agonis flexuosa</em></td>
<td>?</td>
<td>?</td>
<td>7 ft</td>
<td>2&quot; - 0&quot;</td>
</tr>
<tr>
<td><em>Banksia aemula</em> (as B. elatior)</td>
<td>1824</td>
<td>&gt; 39</td>
<td>12 ft</td>
<td></td>
</tr>
<tr>
<td><em>baueri</em></td>
<td>1825</td>
<td>&gt; 38</td>
<td>4 ft bushy</td>
<td></td>
</tr>
<tr>
<td><em>caleyi</em></td>
<td>1830</td>
<td>&gt; 33</td>
<td>9 ft</td>
<td></td>
</tr>
<tr>
<td><em>ericifolia</em></td>
<td>1828</td>
<td>&gt; 35</td>
<td>10 ft x 6 ft</td>
<td>1&quot; - 6&quot;</td>
</tr>
<tr>
<td><em>grandis</em></td>
<td>1825</td>
<td>&gt; 38</td>
<td>10 ft</td>
<td>1&quot; - 6&quot;</td>
</tr>
<tr>
<td><em>littoralis</em></td>
<td>1823</td>
<td>&gt; 40</td>
<td>8 ft x 6 ft</td>
<td></td>
</tr>
<tr>
<td><em>media</em></td>
<td>1825</td>
<td>&gt; 38</td>
<td>5 ft x 4 ft</td>
<td></td>
</tr>
<tr>
<td><em>repens</em></td>
<td>1804</td>
<td>&gt; 60</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><em>spinulosa</em></td>
<td>1828</td>
<td>&gt; 35</td>
<td>6 ft x 4 ft</td>
<td>1&quot; - 3&quot;</td>
</tr>
<tr>
<td><em>spinulosa var cunninghamii</em></td>
<td>1825</td>
<td>&gt; 38</td>
<td>16 ft x 15 ft</td>
<td>1&quot; - 8&quot;</td>
</tr>
<tr>
<td><em>Dryandra</em></td>
<td>?</td>
<td>?</td>
<td>3 ft - 5 ft high</td>
<td></td>
</tr>
<tr>
<td>Larger shrubs</td>
<td>&gt; 38</td>
<td></td>
<td>3 ft x 3 ft, bushy</td>
<td></td>
</tr>
<tr>
<td><em>nervosa, obusa</em></td>
<td>&gt; 38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(pteridifolia, sericifolia)</td>
<td>&gt; 38</td>
<td>3 ft x 3 ft, bushy</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Eucalyptus tetragona</em> (as E. tetragona)</td>
<td>?</td>
<td>?</td>
<td>10 ft</td>
<td></td>
</tr>
<tr>
<td><em>Grevillea robusta</em></td>
<td>1829</td>
<td>&gt; 33</td>
<td>13 ft</td>
<td></td>
</tr>
<tr>
<td><em>Stenocarpus</em> (?) <em>sinuatus</em></td>
<td>1829</td>
<td>&gt; 33</td>
<td>10 ft</td>
<td></td>
</tr>
<tr>
<td><em>Syncarpia</em> (as S. cunninghamii)</td>
<td>1830</td>
<td>&gt; 33</td>
<td>15 ft</td>
<td>2&quot; - 0&quot;</td>
</tr>
<tr>
<td><em>Syncarpia</em> (as S. cunninghamii)</td>
<td>1830</td>
<td>&gt; 33</td>
<td>15 ft</td>
<td>2&quot; - 0&quot;</td>
</tr>
</tbody>
</table>
species were known to have been grown at Kew to around 1860. Smith was always particular about the soil, which had to be free draining, and the size of pots into which his plants went. Apart from a few species growing in the ground in the Palm House and in the Arboretum, all these Australian plants were being cultivated as glasshouse plants in pots and tubs. As most of us have probably had indifferent success with growing plants in pots for any length of time, it might be interesting to list the age and size of some of the Australian plants grown at Kew see table one).

I suppose the first reaction to this table is one of total disbelief - how could you possibly grow trees to 20 - 25 feet in tubs and keep them alive for 30 to 70 years! Not only did they grow them but many flowered and were subsequently illustrated. Some of these species of course we recognise as street and park trees, like Acacia salicina, Angophora bispicata and the various araucarias but it is perhaps a little surprising to see how well the rainforest Acacia and Cryptocarya grew within the confines of a glasshouse; and those who have troubles with the beautiful Western Australian eucalypt, Eucalyptus preissiana, might be surprised to know it was flowered at the Edinburgh Botanic Gardens in 1846.

What intrigued me was the huge trunk size of the eastern species - who has grown Banksia ericifolia or B. spinulosa with a trunk circumference of 18 to 20 inches?

Even the shrubs were spectacularly long-lived, especially those groups that frustrate so many of us, the banksias and dryandras. Many of the eastern species grew to the stature of small trees as we have seen but the western banksias - baueri, caleyi, grandis, litoralis and melika also formed very healthy plants. What intrigued me was the huge trunk size of the eastern species - who has grown Banksia ericifolia or B. spinulosa with a trunk circumference of 18 to 20 inches? Given my interest in Dryandras, it was very pleasing to see that both the larger shrubs and the smaller species were capable of living nearly 40 years in pot culture. Some plants like Dryandra formosa which I know of in garden cultivation in Australia today are over 30 years old - perhaps we might catch these English gardeners yet. However, pride of place for longevity must be given to the prostrate Western Australian Banksia repens three plants of which were raised from seed sent by Peter Good in 1804. Growing in 15 inch pots, two were around 60 years old when removed to the Winter Garden in 1863. Smith adds an interesting postscript on the fate of the third: 'In 1825, one of these was stolen and a few years after I saw it in the Duke of Northumberland's green house at Syon House.' It seems that even the nobility were not above stooping to a little larceny to obtain a particularly desirable plant!
form) were raised from seed sent by Peter Good in 1804; Boronia semialata was introduced in 1816-17 but it wasn’t until 1824 that it was flowered at Colville’s Nursery; and the very pretty (one of its common names in ‘painted lady’) but extremely touchy Burtonia scabra was first grown from Good’s seed in 1804 but wasn’t illustrated until 1857. Oddities were also eagerly sought after. Phillip Parker King took back specimens of the Albany Pitcher Plant (Cephalotus follicularis) around 1823 which flowered at Kew in 1827; Baxter also supplied Colvilles with plants about this time. Several of the Grevillea and Calostemma bulbs sent over by Cunningham, Fraser and others flowered within 12 months when cultivated in a stonehouse. Other unusual plants include Blundordia nobilis, Patersonia glabra and the leafless Daviesia alata (1823) Perhaps the most unusual, and as it turned out, unwelcome introduction was the giant nettle tree Dendrocnide excelsa (then known as Urtica gigas), a plant of which was forwarded from the Illawarra district by Alan Cunningham in 1826. It grew rapidly but as Smith tells us ‘its powerful stinging properties, however, led it to meet with general ill will from the men, and as it died suddenly, it is supposed to have been wilfully killed. It has not since been introduced.

However, Cunningham never neglected his first love, orchids, and between 1823 and 1828 forwarded plants of some 40 species, many of them after the years we are considering. Again, while we tend to think of orchids as being grown, until recently, by enthusiasts, in Smith’s lists we find 7 Caladenia, 14 Dendrobium, 8 Pterostylis and even 3 Thelymitra - again many had flowered and were featured in the horticultural magazines of the period.

Some lessons for us:
I suppose one of the most surprising aspects or this whole story is the range of Australian plants cultivated. They cover some 158 genera in 58 families and many of them are still regarded as ‘difficult’ today and are not commonly grown - plants like Aclema biformum and the various Anthocercis species. Certainly a number of the Dryandras and Western Banksias cause many problems for would-be growers. Yet the fact that some lived to be 30, 40 or even 70 years old indicates that with proper care Australian plants can live for long periods as tub plants. In addition, as many Australian plants which we would normally propagate by cuttings were raised from seed, I think we could perhaps look more to this mode of propagation for some of our Grevilleas and Eremophilas as well as perhaps other genera such as Stylidium and Pimelea. We need more experimentation with our Australian flora - if English gardeners last century could succeed, why can’t we? And perhaps the last point to be made concerns our choice of garden situation for our plants. Before we decide where to grow a plant, do we read up what conditions it requires - well drained soil, part shade, shelter etc or do we simply pop it in the ground and hope for the best. In 1809, Joseph Knight wrote - “it is the business of an intelligent gardener to imitate nature as far as may be practicable, the soil and particular situation in which each species grows wild”. Such advice is as relevant now as it was then.

Tony Cavanagh

References
Finney, C.M. (1984), To sail beyond the sunset. Adelaide, Rigby.

Acknowledgment
I would like to thank Helen Cohn, Librarian at the National Herbarium of Victoria and Dr Jim Ross, Director of the National Herbarium of Victoria for the help extended to me over a number of years while I have been researching the history of Australian plants cultivated overseas. Melbourne is indeed fortunate to have such a wonderful library with extensive collections of nineteenth century horticultural journals which facilitates the task of visualising which Australian plants nineteenth century English gardeners were able to grow and flower.
Extracts from the journal of John Gould Veitch during a trip to the Australian colonies

Richard Clough's article 'Plant Hunting in the South Sea Islands' in the Vol 4, No. 4 of this journal referred to John Gould Veitch's expedition to Australia and the South Sea Islands. Extracts from the journal Veitch kept during this time were serialised in the British journal The Gardener's Chronicle and Agriculture Gazette in 1866. They shed light on the state of gardening in Australia at the time, with, unsurprisingly, an emphasis on the species being grown, as well as providing insight as to the perception of the landscape through English eyes. This article reprints sections of those extracts for the benefit of those that do not have easy access to such literature, although the journal extracts deserve to be published in full.

One is much struck with seeing a garden for the first time, and unable for a time fully to realise the fact that such a state of things is possible.

In common with many travellers to the colony, Veitch was struck by the picturesque nature of Sydney's harbour and lists a number of species growing around the harbour in the first extract of his journal printed. Veitch stayed with Charles Moore, the director of the Botanic Gardens, and the second extract printed, on 13 January 1866, is dated 12 November 1864. It describes Veitch's wonder at the mixture of plants which Sydney's climate allows to co-exist.

One is much struck with seeing a garden for the first time, and unable for a time fully to realise the fact that such a state of things is possible.

Veitch provides a list of species to demonstrate this fact in addition to the fruits which grow well in Sydney. He then comments on a situation which underlines the transient nature of gardens:

There are few private gardens in Sydney where gardening is carried on with any spirit. Those of Mr. Thomas Mort, of Darling Point, the late Mr. William Macleay, of Elizabeth Bay, and Sir Daniel Cooper, of Rose Bay, formerly contained good collections of native and imported plants, but now they are no longer kept up. Mr Young, of The Glebe, possesses by far the best collection of imported plants, consisting chiefly of New Caledonian Perns and Palms, and Imported Orchids, Caladiums, and fine-foliaged plants. Mr Mort's collection of Orchids must at one time have been very complete and well cultivated. Sir Daniel Cooper, previous to his departure for England, spent many thousands of pounds in importing one of the finest sites I have seen. Three large greenhouses were also erected, but now unhappily the latter are almost empty, and the garden is barely kept free from weeds. The late Mr. William Macleay, who, in addition to being passionately fond of flowers, was one of the very best botanists and Naturalists in New South Wales, had gathered together a very large collection of plants, especially bulbous, from all parts of the world. The gardens and ornamental grounds at Elizabeth Bay contain many fine specimens. A large tree of Ficus elastica, with its trunk partially covered with Dendrobiun speciosum and Platycerium alcicorne, and throwing out numerous roots in all directions, is a most striking object in these gardens.

This estate is upwards of 200 acres in extent, commanding an extensive water-frontage and a most beautiful view of the harbour. Glicebetia filabellata and microphylla abound on the sea-side cliffs...

Such observations help explain an earlier entry in 1864 by a correspondent to the Horticultural Magazine and Gardener's Chronicle of New South Wales for a history of gardening in the colony to be written.

Sir—I have often thought that if a sort of History of Gardening, Gardeners, and their Promoters, was given in your Magazine, it would be a matter of very interesting nature to a number of its readers, we often hear of some of the old places, as the Bishop's old place, in Elizabeth's Bay, and many more old places, but this is about all we do bear of them, whereas if we read a little about them, or about the first Vine, and the first Fig planted, by whom, and where, it would not only be a matter interesting to the present generation, but a lasting memorial of the initiation and progress of gardening in New South Wales.

Veitch's extensive description of the Botanic Gardens provides information about the plants growing in the gardens at the time and is a reflection of mid-nineteenth century taste when, referring to one of the three entrances to the gardens, he writes:

by far the prettiest is one recently made, at which a most artistic arrangement of rockwork, planted with Yuccas, Dendrophleas, and other suitable plants, produces a pleasing effect.

The Gardener's Chronicle offering from Veitch's journal on 20 January continues with his visits to the nurseries of Sydney. It is amusing to note the comparison of what is perhaps the 'laid back' attitude of Australian nurserymen to their equivalent in England, although the conditions Veitch considers 'indispensable' may have been beyond the capabilities of the Sydney nurserymen due to lack of funds. Veitch observes the suitability of the gladiolus for the Australian climate unknowingly predicting the rise of a suburban icon many years in advance.

The largest and most important nurseries of Sydney are those of Messrs. Baptist & Son, Shepherd & Co., and Guilfoyle & Son. I must acknowledge that these establishments somewhat disappointed me, probably from having previously heard so much of them. As a rule, there is a want of that order and arrangement in the Sydney nurseries which in England are considered indispensable.

Messrs. Shepherd's was the first established. It contains a fine stock of all kinds of Araceae, Dumbellars, Palms, and Ferns, particularly of the rare Araucaria Rari and the beautiful Danniarra Mooret. There is also a good general assortment of evergreens in pots to suit the trade of the country. There is one greenhouse for propagation. The climate of Australia is rendered it necessary to grow all pot plants under a partial shade. A plan has been adopted throughout the country, of erecting large skeleton sheds or frames, surrounding and covering them with branches of Mellecula or some suitable shrub. The Mellecula being plentiful almost everywhere, is the cheapest material that
can be used, having the advantages of admitting sufficient light and air, and not altogether excluding rain. I found all young nursery stock in pots grown in this way. Messrs. Shepherd have also a country establishment where they grow Roses, fruit trees, and ornamental trees and shrubs extensively.

Araucaria Bidwillii is undoubtedly the finest in cultivation. It forms a beautiful pyramid of the darkest green glossy foliage, 40 feet high by 35 through. Cedrus deodara, Pinus halepensis, Ficus indica, and Magnolia grandiflora are fine trees

The greater part of Messrs. Baptist's establishment is devoted to market gardening. From this a shop in the Sydney market is supplied. This nursery, situated at the foot of the Surrey Hills, was redeemed from a swamp, and has the great advantage of being always damp. It is the largest in Sydney, and contains a good general stock, and many fine specimens. A row of Araucaria excelsa, now 60 feet in height, has been most effectively planted along the entire frontage. The collection of specimen camellias is worthy of special note. Many of the bushes are from 12 to 15 feet high. They are annually loaded with flowers, which as a rule are larger than I have seen in Europe. Messrs. Baptist have raised a number of seedlings, some of which quite equal those of Italy. The Camellia buds fair to become one of the commonest flowering shrubs of Australia. There are four greenhouses in this establishment: the largest of these, attached to the dwelling house, is filled with a collection of Ferns and fine-foliaged plants; the others are used for propagating, and to contain the recent introductions from Europe and elsewhere. There is a large assortment of Coniferae and Evergreen shrubs grown in pots under similar shaded frames to those before mentioned. Amongst the number I noticed Araucaria excelsa, Bidwillii, and Cunninghamii, several species of Ficus, Camellias, Azalea indica, Aralia Skeudelii, and papyrifera, Magnolia fuscata and grandiflora, Pseudolarix, Itea, Syringa, Pelargonium, Grevillea robusta, Berberis Dacvinii and japonica, Evergreen Oaks, several Teconias, &c.

Messrs. Baptist have gone to great expense in introducing plants from Europe. The greater portion of the latest English Gladioli, Daffodils, Gloriosa, Achimenes, Caladiums, Roses and fruit trees are established here. The Gladiolus is admirably suited to the country. The spikes of flowers far surpass anything that I have seen in England. The Rose also grows with great luxuriance. The individual flowers are quite as large as those of Europe, added to which they are admirably suited to the country. The spikes of flowers far surpass anything that I have seen in Europe. Messrs. Baptist have gone to great expense in introducing Camellias and Azaleas, both planted out and in pots. There is one greenhouse, and a large number of the usual covered sheds.

It is not surprising that Veitch, as a plant hunter, was interested in the completeness of plant collections. It must have been with some excitement that he approached Camden Park, but it would seem, from his entry, that he did not find the country between Sydney and Camden aesthetically pleasing. This stands in contrast to his response to the Sydney Harbour environment, where, predictably, he praised the combination of the harbour, cliffs and the variety of vegetation. It is of note that while his entries show that the more exotic and generally green rainforest species were admired, the eucalypts and melaleucas appear too alien, too brown.

Camden Park, the Seat of Sir William MacArthur, November 17, 1864—Sir William MacArthur, who is now almost as well known in Europe as in Australia, is a most enthusiastic amateur in horticulture; he kindly took an especial interest in my visit to his country, and in many ways rendered my stay of increased interest. Camden Park is situated in the centre of an estate of 30,000 acres of fine arable and pasture land. It is 40 miles from Sydney, and is easily accessible by rail, the station of Menangle being within 4 miles of the house. The country between Sydney and Camden is devoid of any interest or beauty. It is one continuation of flat grassy surface, thinly covered with the usual Australian Melaleuca and Eucalyptus scrub. The white or light brown peeling bark, and brown foliage of the many species of Eucalyptus so peculiar to this country, and everywhere so common, gives the landscape a most desolate aspect. The first idea of a person coming from England is, that all the trees are dying, or that each specimen has been struck by lightning. The barren, desolate appearance this produces, deprives the country scenery of all beauty, or semblance of luxuriance...

The white or light brown peeling bark, and brown foliage of the many species of Eucalyptus so peculiar to this country, and everywhere so common, gives the landscape a most desolate aspect.

Camden House stands on an elevation of some 200 feet. The approach to it is poor, and not in keeping with the other portion of the grounds. The gardens are extensive and kept in good order. The collection of plants and fruits at Camden is by far the best I have seen in the colony. No means have been spared to obtain the best varieties in each class. Even our most recent Strawberries are thriving here. The garden is divided into two parts, and is under the superintendence of two gardeners. That in immediate connection with the house is laid out in lawns and shrubberies, with an Orange grove, the picture of health and luxuriance, and two greenhouses for the purpose of propagation, attached. Here may be found many rare plants. All the Californian and Japanese Coniferae are doing well. Lepidocarya rosea, Thun-
bergia Harrisii, Mandevilla sanderolens, Tecoma Jasmino-
loides, Wisteria siunensis, Begonias, Tazoonias, Ipomeas, Passifloras, Sol叶子, Clematis lanuginosa, Fortunil, and
Staudshisb, and Lonicera aureo-retilaeata are among the
climbers. Bougainvillaea spectabilis and splendid flowers
profuse against a north wall. There are few sights more
beautiful than the side of a house completely covered with
these bright magenta-coloured and scarlet flowers. Beaumon-
ta grandiflora, Duranta Burmaradis, Plumbago capensis,
Tecoma retinata, Phyllenis capensis, Heterocentrum
roseum, Magnolia grandiflora, fiscata, putilla, glans, quercus,
consuica, and macrophylla, Campana dependens, the pes-
dudos Ummus cibensis, the Sweet Bay, the Oleander, the
Arbutus, and Lilac. Unud Donax variegata, and several
species of Febus, are common in the shrubberies. There are
also many varieties of Rhododendrons, and both Indian
and Ghent Azaleas, but these require special treatment, and
are mostly grown in pots. Roses are in great perfection.
During the flowering season the ground is literally covered
with the fallen flowers. Some of the seedlings raised on
Camden are distinct and good. Soft-wooded plants are in
abundance. The colours of Verbenas, Penstrias and Gerani-
abundance. It is found that
camellias is worthy of special note.
Many of the bushes are from 12 to 15
feet high. They are annually loaded with
flowers, which as a rule are larger than
I have seen in Europe. Messrs. Baptist
have raised a number of seedlings,
some of which quite equal those
of Italy. The Camellia bids fair to
become one of the commonest
flowering shrubs of Australia.

The collection of specimen
camellias is worthy of special note.
The trip by water from Sydney to Parramatta on a fine
day is very interesting. The scenery is pretty, although there
is always the want of fine luxuriant vegetation. There are
several small towns and gentlemen's seats on both banks,
but gardening is a very difficult and expensive hobby. The
ground is so rocky and poor that scarcely anything will
grow. Mr Wright of Hunter's Hill, has spent a fortune in
blasting the rock and making a garden, and even now with
only partial success. The Rev. Mr Turner's garden at Hyde
contains a good collection of plants, amongst which is the
cone-bearing Aruacaria Bidwilli, but here likewise the
shallow poor soil is a great drawback. Orange plantations
are established on a large scale throughout the district lying
between Sydney and Parramatta, and in past years have
proved most lucrative. Recently a great proportion of the
trees have become sickly and attacked with white scale, in
some cases destroying the whole plantation. I attribute the
cause of this in great measure to the want of proper
drainage, and to the fact that little or no care is taken in
planting and attending to young trees.

Veitch continues with comments on the varieties of
oranges grown and their yields. His next excursion was on
28 November when he journeyed to Botany Bay, La
Perouse and back to Sydney via Randwick with a Mr.
Edward Hill. On 8 December 1864, he sailed for Brisbane
and after spending a few days there he embarked on the
H.M.S. Salamanca, taking four Wardian cases with him,
and sailed for Somerset, Cape York.

Colleen Morris

References
1. White, F.R., Horticultural Magazine and Gardener's Calendar of
New South Wales, No. 8, 1864
Conductor Mr John Gelding,
George Street Markets, p. 225.
The Wentworth Mausoleum

The Vaucluse Estate, purchased by William Charles Wentworth (1790-1872) in 1827, is one of the nation's best known historic properties. It has been a heritage site since 1911 when it was acquired by the New South Wales government for recreation purposes. Its pleasure grounds are admired by the public and connoisseurs alike.

Until recently, the Wentworth Mausoleum, sited approximately 700 metres to the north-east of the house, was scarcely known. Fortunately, a Commonwealth One Nation Grant in 1992-93 allowed the Historic Houses Trust of New South Wales and Clive Lucas, Stapleton and Partners to complete a conservation program for the Mausoleum and its grounds and provide interpretation for visitors. It is now leased to the Historic Houses Trust by the Anglican Diocese. Located on Chapel Road, it lies between Wentworth Road and Boambillee Avenue.

The Wentworth Mausoleum and iron-palisade fenced compound was commissioned by Sarah Wentworth (1805-1880) following the death of her husband in England on 20 March 1872. The tomb site she chose was near the summit of a picturesque sandstone ridge known to the family as 'Parsley Hill'. Parsley Bay is immediately to the east and the compound once overlooked Vaucluse Bay.

The position was a commanding one and NSW Premier Sir James Martin noted at the William Charles Wentworth graveside service following a state funeral on 7 May 1873 that 'this monument will be a lasting and conspicuous memorial, visible to all who enter and all who leave our port'. This vista and visibility was lost with the subdivision of the Vaucluse Estate after 1911.

The tomb was carved into an immense sandstone border and a mausoleum constructed over it by the Mansfield Brothers, a Sydney architectural firm. An ashlar sandstone wall was constructed to contain the area and an iron-palisade fence erected atop the wall by a Mr Pike, who received £34 18s 6d for his trouble. Substantial loam fill was brought to the site, the ground levels within the wall were substantially raised and subsoil drainage was ultimately installed to carry the rainwater run-off.

This monument will be a lasting and conspicuous memorial, visible to all who enter and all who leave our port.

Although the original soil in this area was thin and poorly watered, nineteenth century paintings and prints show that the Wentworths cleared this area and created a grassland park setting. A tree-lined north-east vista had also been shaped in this part of their curtilage. This extensive landscaping is evident in Eugene von Guerard's paintings and prints, 'Sydney Heads' of 1866 and 1867, with a vantage point on the South Head Road above Vaucluse. This was gardening on a grand scale.

The earliest photographic images of the mausoleum grounds show it on the fringe of this surviving grassland. An image from circa 1880 also reveals the family's attempt to introduce trees into the compound. Sarah Wentworth had distinct views on a planting scheme for the site. She writes, 'it will not do to plant many trees inside the fence to hide the rocks, if one willow at each side of the chapel at a distance...it will look well from the hill.' While there is no evidence suggesting willows were planted, the 1880 photograph of the tomb compound seems to show the beginning of a formal (but unidentifiable) tree planting. By circa 1910, one can see that a formal border of Lophostemon confertus (Brush Box) has become well established around the inside perimeter of the mausoleum fence. These innocent plantings were to cause considerable damage as time passed.

As the Lophostemon confertus matured, their increasing diameter and root structure began to displace the stone...
wall. This displacement, in turn, opened the ironwork foot¬
ings to rainwater and a corrosion cycle began. The
swelling of the iron corrosion ultimately split the sandstone
base and areas of the wall began to collapse in the twenti-
eth century.

When the responsibility for the Wentworth Mausoleum
passed to the Historic Houses Trust and the One Nation
conservation work began, Lorna Harrison Landscape Archi-
tects undertook a vegetation survey and identified the sur-
viving original plantings as *Lophostemon confertus*, *Syzy-
gium luebbenii* (Small-leaved Lillipilli), *Magnolia gran-
diflora* (Bull Bay Magnolia) and perhaps *Ficus pumila*
(Creeping Fig) which seems to be growing on the side of
the mausoleum in early photographs. The understorey veg-
etation within the compound was self-seeded *Pittosporum*
varieties and typical garden escapes such as *Strelitzia* and
*Schefflera*.

In order to retain the mature plantings, the most
damaged section of the stone wall and iron palisade
fencing was curved during the conservation program, to
accommodate the trees. But, in spite of careful tree surgery
by Chris Bradley, the removal of one original *Lophostemon*
was required. Upon resiting of the wall, a new specimen
was introduced in this spot.

The self-seeded understorey within the mausoleum com-
 pound had been mown regularly by the Anglican Diocese,
but in recent years, it had been neglected. This was cleared
and the build-up of soil levels inside the wall was removed to restore original drainage for the stonework. Once graded, it was turfed with durban grass, a shade-resistant species that requires little or no mowing.

The landscape management plan for the immediate mausoleum compound is to simply provide ongoing tree care and to allow the durban grass to slowly vanish under naturally occurring leaf cover. Outside the walled area, the regeneration of this area’s native species is being encouraged through plantings and selective weeding. The remnant plantings of Ficus and surviving perennials introduced by the family have been left untouched. This mausoleum and landscape project received a Woollahra Council Heritage Award in 1993.

References
1 Freeman’s Journal, 10 May 1873
2 These original images are in the permanent collection of the Art Gallery of NSW and the National Gallery of Victoria. A lithograph was also created from these images.
3 Sarah Wentworth to daughter Thomasine, ca. 1875-80, Wentworth Papers, Mitchell Library A868, p.209.

The documentation for the Wentworth Mausoleum project can be found in:

The Making of My Garden: Buskers End

The estate agent showed me Buskers End in mid 1976 and, run down and neglected as it was, I knew immediately that I need search no more. With the house I felt comfortable and the ground contained enough of the remnants of a garden to give that maturity a new garden lacks, particularly important to me as I was rapidly acquiring a certain 'maturity' myself.

For a time other commitments occupied me, but the early 1980s saw the garden start to develop in earnest. Having moved from Sydney to Bowral in the Southern Highlands of NSW, I could now indulge myself and have all those wonderful cold climate plants that accentuate the seasonal differences that those from warmer climates often deny.

Initially I sought out lots of the slower growing 'dwarf' conifers, wonderful for their variety of shapes and textures. I added Japanese maples that were just then becoming available in a fascinating range of beautiful cultivars. Next came my love for Rhododendrons, species Hydrangea and of course, Viburnums which I found indispensable for their diversity and wonderful perfume. The list gets longer and longer.

Protection from the hot drying winds of summer is essential for tender young leaves and this meant planting hedges and shrub borders for shelter. In this way the garden became gradually divided up into separate areas, to each of which I tried to give a different feel. This arrangement has made it possible to fit much into quite a small garden, about 2 acres, but does create the problem of how to make each area flow successfully into its neighbour.

My overriding interest is still with the plants themselves and somehow landscaping considerations have become less important. This is definitely not the recommended way to plan a garden and I seem to spend quite a lot of effort correcting my mistakes.

The development of the nursery and a growing interest in herbaceous perennials puts new pressures on the garden, both in content and design. So too does the regular opening of the garden to visitors. One continually must compromise, balancing these needs with personal preference.

Most importantly, the garden is my own private haven. In it I can be happy and have the pleasure of seeing plants growing, thriving and 'doing their thing'.

Michael Bogle

Joan Arnold
Southern Highlands/Southern NSW Branch

Report on John Brookes' Lecture, Bowral, 19 March, 1994

On Saturday, 19 March, a group of garden lovers gathered at Oxley College, Burradoo, in the Southern Highlands of NSW to hear John Brookes, foremost visiting English garden designer, author and lecturer.

Few landscape architects have had the same opportunity to develop their garden design skills in so many different climates. His work has taken him to many parts of the world including Europe, the USA, Japan, South America, South Africa, the Middle East, New Zealand and Australia. He is considered one of the few current garden designers with a broad concept of the future direction of gardens and how they should relate to people.

The Southern Highlands turned on one of its occasional cool damp days but the inevitable weather certainly did not dampen the spirits of 400 people who travelled many kilometres to swell the ranks of the local and Sydney enthusiasts. Morning tea was provided on the lawns of the college where friends met before moving into the hall to hear John Brookes give an excellent lecture.

He started with the history of the development in garden design and style, showing the social and cultural influences on gardens throughout the centuries. He pointed out the strong relationship between art and garden design including the influence of the modern era on architecture and landscaping. He described, with the aid of excellent slides, the principles of good garden design with a wonderfully artistic and commonsense approach.

He said that with people's greater concern for the environment and a need to escape the pressures of work and a hectic modern lifestyle, there is a move to more functional, low maintenance gardens that relate to the natural surrounding landscape.

Because the Australian landscape and environment varies so much, John thought Australian gardens should reflect their region and incorporate the influence of the owner's social or cultural background, combined with a strong aesthetic and functional design. He thought that perhaps the design shapes could relate more to the surrounding landscape. He also suggested that Aboriginal art could be reflected in the Australian landscape movement.

Rather than recreating the Australian bush in our backyards, he suggested that we should be incorporating native and introduced species in a stronger design that has more emphasis on the natural environment in which it is situated.

The lecture concluded with several questions asking John to explain in detail his famous 'Gravel Garden' ideas. By the end of the lecture everybody was inspired by his knowledge of garden history, design and plants, his artistic approach to the whole subject, and how he related it to the individual.

A tasty boxed picnic lunch followed and the visitors were able to mingle under the marquee or around the college gardens before leaving for inspections of three beautiful gardens in the district.

Joan Arnold opened 'Buskers End', her garden and nursery at Bowral where she propagates rare and unusual perennials and holds the National Collection of Hydrangeas. Joan Arnold is a plantswoman and this garden reflects her love of plants. The garden is laid out in a woodland setting around a 1923 bungalow and features include a Hosta walk, Laburnum walk and stone terraces leading to a water feature (see article on facing page).

John and Robyn Hawkins opened their garden again for us and many people were fascinated to see how beautifully the more recent architectural Haddonstone elements in the garden have mellowed with the maturity of the later plantings. The old hawthorn hedges planted in 1888 which had become very overgrown and which have been resurrected by cutting and laying in the English style, were of great interest to all those who visited. Their clipped rounded form now fits comfortably with the rolling hills of the surrounding landscape.

Robert and Janet Constable's garden, 'Greenbriar Park', showed us all what can be achieved in five years. There is an amazing growth of interesting trees and shrubs and the continuing development of this garden will be keenly followed in the coming years. The object of this parklike garden has been to establish over a ten year period a blend of formality in the form of lawns, hedges, perennial borders and exotic trees with the existing elements of an Australian landscape.

The Committee of the Southern Highlands Branch of the AGHS is extremely grateful to the owners of Buskers End, Greenbriar Park and Whitely, and to Oxley College for their cooperation and generosity which contributed greatly towards the success of the day. We hope that many of those who attended the day will take up membership of the Society.

Libby Webster

CALENDAR OF EVENTS CONTINUED FROM PAGE 16

OCTOBER

SYDNEY & NORTHERN NSW BRANCH

- Sunday 16
  Guided walking tour of historic Rookwood Cemetery
  Time: 11 am to 3.30 pm, Cost $10 (all proceeds to restoration works). BYO picnic lunch. Bookings: Jan Gluskie P.O Box 539, Strathfield, 2135 or phone Tempe Beavan (02) 969 3043 (evenings & weekends).

NATIONAL MANAGEMENT COMMITTEE

- Friday 21-Monday 24

- Tuesday 25-Friday 28
  Post conference Victorian tour of Edna Walling Gardens led by Trisha Dixon. More details to follow.
CALENDAR OF EVENTS

MAY

TASMANIAN BRANCH
- Sunday 15

SOUTH AUSTRALIAN BRANCH
- Sunday 15
Venue: ‘Cedars’, Heysen Road, Hahndorf, the Heysen family property. Time: 11.30 am. Cost: $5.00 entry per person to ‘Cedars’ property. Payment may be made to the Secretary on the day. Bring a picnic lunch, we may visit another garden in the Hills area after lunch. If you are not visiting ‘Cedars’ in the morning and wish to visit the other garden in the afternoon please phone the Secretary or one of the Committee members for details and directions.
- Saturday 21
Gardening at Bishop’s Court, Palmer Place, North Adelaide. Time: 9.30 am. Come prepared with gloves, gardening tools, morning tea and lunch if you are willing to stay on into the afternoon. Please advise the Secretary if you can attend. These working bees will be fun and rewarding. Phone Secretary on 43 9873 (ah) or 228 2311 (w).
- Tuesday 24
Lecture, Venue: Adelaide Botanic Gardens Lecture Room. Guest Speaker Mr Philip Knight will give an illustrated talk (slides) on ‘The History of Colonel Light Gardens as a Garden Suburb’. Also a video on ‘National Trust Gardens in the UK’. Parking available adjacent to the Administration building. Supper available adjacent to the Administration building. Donations appreciated for tea, coffee, biscuits.

SOUTHERN HIGHLANDS/SOUTHERN NSW BRANCH
- Sunday 22
Bundanon Day. On Sunday May 22, with the kind permission of the Bundanon Trust, an inspection and conducted tour of Bundanon is proposed for members and friends. Bundanon is listed on the Register of the National Estate and is situated on the west bank of the Shoalhaven River. The main homestead is a Georgian sandstone building completed in 1866 by Dr Kenneth MacKenzie. Sandstone used in the construction was taken and pit sawn on the property. Other buildings in the homestead group are of weatherboard construction and date from the 1840s. The 1,000 hectare Bundanon properties and collections are valued at more than twelve million dollars, comprising art works, letters, antique furniture, three grand pianos and were given to the nation by Arthur and Yvonne Boyd in March 1993. Paintings and ceramics by three generations of the Boyd family are on show in the homestead, garden and studio. Time: 11 am to 3 pm. Cost: $20 per head. BYO picnic. Information: Barbara & Robert Reed PH (012) 61 7819

JUNE

SOUTH AUSTRALIAN BRANCH
- Friday 17
AGM Dinner Meeting. Venue: Sir Donald Bradman Dining Room, Adelaide Oval. Time: 7.00-7.30 pm for pre-dinner drinks. Past President Tony Whitehall will give an enthralling account of his trip to the UK and Europe in 1993, with slides.

VICTORIAN BRANCH
- Tuesday 14

JULY

SYDNEY & NORTHERN NSW BRANCH
- Sunday 31
Walter Burley Griffin — An American Landscape Architect in Australia. An illustrated talk by Professor James Weirick, Head of the School of Landscape Architecture, University of NSW. Venue: Annie Wyatt Room, National Trust Centre, Observatory Hill Sydney. Time: 2.30 pm. Cost: $5 (includes refreshments). ANNUAL GENERAL MEETING will be held after this talk. Please come and show your interest and support and make this an opportunity to put forward your ideas.

AUGUST

ACT, MONARO AND RIVERINA BRANCH
- Saturday 6 & Sunday 7
Winter Seminar: Identifying plants in the winter garden; drawing measured plan of garden; fragrance in the winter garden; history of the kitchen garden; natives in the winter garden; erudite literature for the winter months; flower arrangements from the winter garden; garden visits to three outstanding historic Monaro gardens. Venue: Traveller’s Rest Historic Inn, Cooma. Cost: $35 single day, $50 both days (includes lunch, morning and afternoon tea) Optional dinner Saturday night. Limited numbers so book early. Send cheque to AGHS, Box 1630, Canberra, ACT, 2601. For further information contact Trisha Dixon (06) 53 5578, Victor Crittenden (06) 250 9506, or Leslie Lockwood (06) 258 4547.

VICTORIAN BRANCH
- Tuesday 9
Annual General Meeting. Venue: National Herbarium, Birdwood Avenue, South Yarra. Time: 7.30 pm

CONTINUED ON PAGE 15